DOCKET NO.: ABDT-0576 / B030280 **PATENT**

Application No.: 10/699,104 **Office Action Dated:** 09/08/04

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for controlling a manufacturing process, comprising:

retrieving to a user interface in response to a user request at least one of scheduling and inventory data relating to an item to be manufactured;

retrieving to the user interface in response to a user request design data corresponding to the item to be manufactured;

transmitting <u>in response to a user request at the user interface</u> control data to at least one device adapted to manufacture the item;

receiving at the user interface real-time manufacturing event notification data from the at least one device; and

updating at least one of scheduling and inventory data to reflect-the <u>real-time</u> manufacturing event notification data.

- 2. (Currently Amended) The method of claim 1, wherein retrieving to a user interface in response to a user request at least one of scheduling and inventory data relating to an item to be manufactured comprises retrieving data relating to materials required to manufacture the item.
- 3. (Currently Amended) The method of claim 1, wherein retrieving to a user interface in response to a user request at least one of scheduling and inventory data relating to an item to be manufactured comprises retrieving data relating to the scheduling of multiple processes adapted to manufacture the item.
- 4. (Original) The method of claim 3, wherein retrieving data relating to the scheduling of multiple processes adapted to manufacture the item comprises retrieving data relating to scheduling of winding, tank fabrication, and processing.

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5. (Currently Amended) The method of claim 1, wherein retrieving to a user interface in response to a user request design data comprises retrieving electronic drawing data corresponding to the item to be manufactured.

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- 6. (Original) The method of claim 5, further comprising deriving from the electronic drawing data control signal data.
- 7. (Original) The method of claim 1, wherein transmitting control signal data comprises transmitting OPC formatted data.
- 8. (Original) The method of claim 7, further comprising converting XML formatted data to OPC formatted data.
- 9. (Currently Amended) The method of claim 1, wherein receiving <u>real-time</u> <u>manufacturing</u> event notification data from the at least one device comprises receiving data indicating manufacture of the item is complete.
- 10. (Currently Amended) The method of claim 1, wherein receiving <u>real-time</u> manufacturing event notification data from the at least one device comprises receiving data indicating an intermediary event in the manufacture of the item is complete.
- 11. (Original) The method of claim 10, wherein receiving data indicating an intermediary event in the manufacture of the item is complete comprises receiving data indicating at least one of cutting, winding, assembly in the manufacture of a transformer core is complete.
- 12. (Currently Amended) The method of claim 1, wherein updating <u>the</u> at least one of scheduling and inventory data comprises updating data to identify an event in the manufacture of the item is complete.

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13. (Currently Amended) The method of claim 1, wherein updating <u>the</u> at least one of scheduling and inventory data comprises updating scheduling and inventory data to identify at least one of a transformer core has been cut, a transformer core has been wound, and a transformer core has been assembled.

14. (Currently Amended) A system for controlling a manufacturing process, comprising:

an enterprise resource planning (ERP) ERP server, said ERP server having stored thereon transactional data comprising scheduling and inventory data relating to an item to be manufactured, and said ERP server adapted to receive requests and provide access to the scheduling and inventory data;

a scheduling and planning agent in communication with said ERP server, said scheduling and planning agent adapted to receive requests for schedule and inventory data, retrieve schedule and inventory data from said ERP server, and transmit schedule and inventory data to said ERP server; and

a process control interface in communication with said scheduling and planning agent, said process control interface adapted to request scheduling and inventory data <u>in response to a user request</u>, <u>request design data in response to a user request</u>, transmit control signals to a manufacturing machine <u>in response to a user request</u>, receive <u>real-time</u> event notification data from the manufacturing machine, and transmit the <u>real-time</u> event notification data to said scheduling and planning agent,

wherein said scheduling and planning agent is further adapted to forward the <u>real-time</u> event notification data to said ERP server and said ERP server is further adapted to update the <u>transactional</u> scheduling and inventory data to reflect the <u>real-time</u> event notification data.

15. (Currently Amended) The system of claim 14, further comprising a design data server communicatively coupled to said scheduling and planning agent, said design data server having stored thereon design data specifying design characteristics of the item to be manufactured, wherein said scheduling and planning agent is adapted to retrieve said design data in response to a user request.

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16. (Original) The system of claim 14, wherein said event notification data comprises data indicating manufacture of the item is complete.

- 17. (Currently Amended) The system of claim 14, wherein said even event notification data comprises data indicating an intermediary event in the manufacture of the item is complete.
- 18. (Currently Amended) A method for integrating transactional and real-time manufacturing data, comprising:

maintaining a database comprising <u>transactional data comprising</u> scheduling and inventory data;

maintaining a database comprising design data;

retrieving transactional data comprising scheduling and inventory data to a user interface in response to a user request;

retrieving design data to the user interface in response to a user request;

at the user interface, controlling a manufacturing machine using at least in part the design data scheduling and inventory data;

at the user interface, receiving real-time event notification data from the manufacturing machine; and

updating the database <u>comprising transactional data comprising scheduling and inventory data</u> to reflect the real-time event notification data.

- 19. (Original) The method of claim 18, wherein receiving real-time notification data comprises receiving data indicating an intermediary event in a manufacturing process has been completed.
- 20. (Original) The method of claim 19, wherein updating the database comprises updating the inventory data.